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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/804,169	03/19/2004	Ning Li	58268.00368	7402

32294 7590 07/09/2004

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EXAMINER

MOTTOLA, STEVEN J

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 07/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/804,169

Applicant(s)

LI ET AL.

Examiner

Steven J. Mottola

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3-19-04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 48-90 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 66,73-77,79 and 80 is/are allowed.
- 6) ☒ Claim(s) 48-65,67-72,78 and 81-90 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claims 48-65,67-72,78,81-85 and 88-90 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 48-65 specify that the first stage has three voltage sources when it appears to only have two in the figures, and the third voltage source appears to be in the second stage. It appears claims 67-72 were meant to depend from claim 66 rather than claim 65. Claim 78 refers to voltage source when the parent claim 75 refers to current sources. Claims 81-85 refer to thick and thin device 'signals' when only the devices themselves could be characterized as 'thick' or 'thin'. It appears claims 88-90 were meant to depend from claim 86 rather than claim 85.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 86-87 are rejected under 35 U.S.C. 102(b) as being anticipated by Huijsing et al.

Fig. 5b of Huijsing et al. shows complementary input pairs Q1,Q3 and Q2,Q4 which may be read as the first and second input stage of the first amplifying means of the claims while the cascode transistors Q11-Q14 may be read as the second amplifying means. In re claim 87, note load resistors R11-R14.

Claims 66,73-77 and 79-80 are allowed.

While Huijsing et al. disclose complementary input pairs that feed a second stage including cascaded transistors (see fig. 5b for instance) the second stage does not output a differential signal. Ryat discloses switching between complementary input pairs based on the input common mode voltage but lacks the differential resistors across the output of claims 73 & 75. Regarding claim 66, the pairs of Ryat are not switched on and off at the same voltage as required by the last two paragraphs of the claim.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven J. Mottola whose telephone number is 571-272-1766. The examiner can normally be reached on M-Th from 8 to 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal, can be reached on 571-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Steven J. Mottola
Primary Examiner